

Replacement Sheet
Serial No. 10/597,373
Inventor: M. Edward Medof

3121 actacagggc accgactcat tggtaactca tctgctgaat gtatcctctc aggcaatact
3181 gcccatttggaa gcacgaagcc gccaattttgt caacgaattt ctttgtggct acccccaacc
3241 atcgccaatg gagatttcat tagcaccaac agagagaattt ttcaactatgg atcagtgggt
3301 acctaccgct gcaatcttgg aagcagaggg agaaaagggtgt ttgagcttgg gggtgagccc
3361 tccatatact gcaccagcaa tgacgatcaa gtggcatct ggagcccccc cgccccctcag
3421 tgcattatac ctaacaaaatg cacgcctcca aatgtggaaa atggaatattt ggtatctgac
3481 aacagaagct tattttcctt aaatgaagttt gtggagttt ggtgtcagcc tggctttgtc
3541 atgaaaggac cccgcgtgt gaagtgcag gccctgaaca aatgggagcc agagttacca
3601 agctgctcca ggggtgtca gccccttcca gaaatcctgc atggtgagca taccggcaagg
3661 catcaggaca acctttcacc tgggcaggaa gtgttctaca gctgtgagcc tggctatgac
3721 ctcagagggg ctgcgtctc gcactgcaca ccccaggag actggagccc tgaagcccc
3781 agatgtgcag tgaatccctg tgatgacttc ttgggtcaac tccctcatgg ccgtgtgcta
3841 tttccactta atctccagct tggggcaaaag gtgtccttgc tctgtatgaa agggtttcgc
3901 ttaaaggcga gttccgttag tcatttggtc ttgggtggaa tgagaagcc ttggaataaac
3961 agtgttccctg tgtgtgaaca tatctttgtt ccaaattcctc cagctatcct taatgggaga
4021 cacacaggaa ctccctctgg agatattccc tatggaaaag aaatatctta cacaatgtgac
4081 ccccacccag acagagggat gaccttcaac ctcattgggg agagcaccat ccgcgtcaca
4141 agtgcaccctc atgggaatgg gggttggagc agccctgccc ctcgcgtgta actttctgtt
4201 cgtgcgtggc actgtaaaac cccagagcag ttccattttt ccagtcctac gatccccatt
4261 aatgactttt agtttccatgtt cgggacatct ttgaattatg aatgcgtcc tgggtatTTT
4321 gggaaaaatgt tctctatctc ctgccttagaa aacttggctt ggtcaagtgt tgaagacaac
4381 tgttagacgaa aatcatgtgg acctccacca gaacccttca atggaatggt gcatataaaac
4441 acagatacac agtttggatc aacagttaat tattcttggta atgaagggtt tcgactcatt
4501 ggttccccat ctactacttg ttcgcgttca ggcaataatg tcacatggga taagaaggca
4561 cctatttgtt agatcatatc ttgtgagcca cttccaaaccat tatccatgg agacttctac
4621 agcaacaata gaacatctt tcacaatggaa acgggtggtaa cttaccatgtt ccacactgg
4681 ccagatggag aacagctgtt tgagcttggta ggagaacggt caatatattt caccagcaaa
4741 gatgatcaag ttgggtttt gggcggcctt cccctcggtt gtatttctac taataaatgc
4801 acagctccag aagttggaaa tgcaattttaga gtaccaggaa acaggagttt ctttccctc
4861 actgagatca tcaagtttag atgtcagccc gggttggtaa tggtagggc ccacactgt
4921 cagtggcaga ccaatggcag atggggggcc aagtcgcac actgcgtccag ggtgtgtc
4981 ccgcctccag aaatcctgca ttgtgagcat accctaaagcc atcaggacaa cttttcacct
5041 gggcaggaag ttttctacag ctgtgagccc agctatgacc tcagaggggc tgcgtctctg
5101 cactgcacgc cccaggagaa ctggagccctt gaagccccctt gatgtacagt gaaatccctg
5161 gatgacttcc ttggccaaact ccctcatggc ctgtgtctac ttccacttta tccatgtt
5221 ggggcaaaagg ttgcctttgtt ttgcgtatgaa gggttccatgaa taaaaggcag gtctgtatg
5281 cattgtgtct tggctggaaat gaaaggccctt tggaaatagca gtgttccatgtt gtgtgaacaa
5341 atctttgtc caaatcctcc agctatcctt aatgggagac acacaggaac tccctttgg
5401 gatattccctt atggaaaaga aatatcttac gcatgcgaca cccaccaga cagagggatg
5461 accttcaacc tcattgggaa gagctccatc cgctgcacaa gtgcacccatc agggaaatgg
5521 gtttggagca gcccctcccc tcgcgtgttca ctttctgtt ctgcgtccctt cccacatcca
5581 cccaaagatcc aaaacgggca ttacattggaa ggacacgtat ctctatatctt ccctggatg
5641 acaatcagct acacttgttca ccccgctac ctgttgttgg gaaaggccctt cattttctgt
5701 acagaccagg gaatctggag ccaattggat cattattgca aagaagtaaa ttgttagctt
5761 ccactgtttt tgaatggaaat ctcgaaggag tttagaaatgtt aaaaagtata tcaatgt
5821 gattatgttca ttgttgttgg tgaatggatgg tataactctgg aaggcagtcc ctggagcc
5881 tgccaggccg atgacagatgg ggacccttcc ctggccaaat gtacctctcg tgcacatgt
5941 gctctcatag ttggcactttt atctggatcg atcttcttta ttttactcat cattttccct
6001 tcttgatata ttctaaagca cagaaaaggc aataatgcac atgaaaacccc taaagaagtg
6061 gctatccatt tacattctca aggaggcagc agcgttccatc cccgaactctt gcaaaacaaat
6121 gaagaaaata gcagggtccctt tccttgacaa agtactatac agctgaagaa catctcgaaat
6181 acaattttgg tggaaagga gccaatttgc attcacagaa tcagatctga gcttcataaaa
6241 gtcttggatc tggacttcaca gagacgcaga catgtgcact tgaagatgtt gccccttccc
6301 tggtaacctt caaagctccctt gcctttgtt gtgcgtactt gtaaaccggc cacccttctg
6361 cctcgctca aacgcacaca gtatctgtt cagggaaaag actgcatttta ggagatagaa
6421 aatagttgg attactttttt ggaataaggtt gttgccttgg atttctgtt tggtaaggtgg

Fig. 3 (Cont.)

Replacement Sheet
Serial No. 10/597,373
Inventor: M. Edward Medof

```

6481 tcactgttct tttttaaaat attttaata tggaaatgggc tcagtaagaa gagcttgaa
6541 aatgcagaaa gttatgaaaa ataagtcact tataattatg ctacctactg ataaccactc
6601 ctaatatttt gattcatttt ctgccttatct tcttcacat atgtgtttt ttacatacgt
6661 actttcccc ccttagttt tttcccttta ttttatagag cagaacccta gtctttaaa
6721 cagtttagag taaaatataat gctatatcag ttttacttt ctctagggag aaaaattaat
6781 ttactagaaa ggcatgaaat gatcatggga agagtggtt agactactga agagaaatata
6841 ttggaaaata agatttcgat atcttcttt ttttgagat ggagtctggc tctgtctccc
6901 aggctggagt gcagtggcgt aatctcgct cactgcaacg tccgcctccc g

```

Fig. 3 (Cont.)

Fig. 4A

SEQ. ID NO:5

MEPPGRRECPFPSWRFPGLLLAMVLLYSFSDACEEPPTFEAMELIGKP	50
KPYEIGERVDYKCKKGFYIPLATHTICDRNHTWLPVSDDACYRETCP	100
YIRDPLNGQAVPANGTYEFGYQMHFICNEGYYLIGEEILYCELGSVAIW	150
SGKPPICEKVLCPPPPIKNGKHTFSEVEVFEYLDATYSCDPAPGPDPF	200
SLIGESTIYCGDNSVWSRAAPECKVVKCRFPVVENGQISGFGKFKYYKA	250
TVMFECDKGFYLDGSDTIVCDSNSTWDPPVPKCLKVSTSSTKSPASSAS	300
GPRPTYKPPVSNPYGPKEEGILDSDLDVWVIAVIVIAIVVGAVICVVP	350
YRYLQRRKKKGADGGAEYATYQTKSTTPAEQRG	

Fig. 4B

SEQ. ID NO:6

```

1 tctgctttcc tcggagaaaa taacagcgtc ttccgcgcgg cgcatggagc ctcccgcccg
61 ccgcgagtgt cccttcctt cctggcgctt tctgggttg ctctggcg ccattgtgtt
121 gctgctgtac tccttctccg atgcctgtga ggagccacca acatttgaag ctatggagct
181 cattggtaaa ccaaaaccct actatgagat tggtaacga gtagattata agtgtaaaaa
241 aggataacttc tatataccctc ctcttgcac ccatactatt tgtatcgga atcatacatg
301 gctacctgtc tcagatgacg cctgttatag agaaacatgt ccataatac gggatcctt
361 aaatggccaa gcagtcctg caaatggac ttacgagtt gttatcaga tgcactttat
421 ttgtatgag gtttattact taattggta agaaatttta tattgtgaac taaaaggatc
481 agtagcaatt tgagcggta agccccaaat atgtaaaaag gtttgtgtc caccacctcc
541 aaaaataaaa aatggaaaaac acacccctt tagttagaa gtatttgagt atottgatgc
601 agtaacttat agttgtgatc ctgcacctgg accagatcca ttttcaactt ttggagagag
661 cacgatttat tgtggtgaca attcagtgtg gactcgtgt gctccagagt gtaaagtgg
721 caaatgtcga ttccagtag tcgaaaatgg aaaacagata tcaggattt gaaaaaaaaatt
781 ttactacaaa gcaacagtta tggttgaatg cgataagggt ttttacctcg atggcagcga
841 cacaattgtc tgtgacagta acagtacttg ggatccccca gttccaaagt gtcttaaagt
901 gtcgacttct tccactacaa aatctccagc gtccagtgcc tcaggtccta ggcctactta
961 caaggctcca gtcctcaaatt atccaggata tcctaaacct gaggaaaggaa tacttgacag
1021 tttggatgtt tggtcattt ctgtgattgt tattgccata gttgtggag ttgcagtaat
1081 ttgtgtgtc ccgtacagat atcttcaaag gagaaaggaaag aaaggaaag cagatggtgg
1141 agctgaatat gccacttacc agactaaatc aaccactcca gcagagcaga gaggctgaat
1201 agattccaca acctggttt ccagttcatc ttttgcactt attaaaatct tcaatagttg
1261 ttattctgtc gtttcaactt catgagtgc actgtggctt agctaattt gcaatgtggc
1321 ttgaatgttag gttagcatct ttgatgttc tttgaaactt gtatgaattt gggtatgaac
1381 agattgcctg ctcccttta aataacactt agatttattt gaccagtcg cacagcatgc
1441 ctgggtgtat taaagcaggg atatgtgtt tttataaaa ttggcaaaat tagagaaata
1501 tagttcacaa tgaaattata ttttctttgt

```

Replacement Sheet
Serial No. 10/597,373
Inventor: M. Edward Medof

I G E S T I R C T S D P Q G N G V W S S
I P A P R C G I H H H H H

Fig. 8A (Cont.)

Fig. 8B

SEQ. ID NO: 14

Replacement Sheet
 Serial No. 10/597,373
 Inventor: M. Edward Medof

GATTTGTTGTGATGAAGGATTCAATTAAAAGGCAGCTGCTAGTTATTGTGTCTTG
 GCTGGAATGGAAAGCCTTGGAAATAGCAGTGTCCAGTGTGAACAAATCTTTGTCCA
 AGTCCTCCAGTTATTCTAATGGGAGACACACAGGAAACCTCTGGAAGTCTTCCCTT
 GGAAAAGCAGTAAATTACACATCGCACCCCCACCCAGACAGAGGGACGAGCTCGACCTC
 ATTGGAGAGAGCACCATCCGCTGCACAAGTGAACCTCAAGGAATGGGGTTGGAGCAGC
CCTGCCCTCGCTGTGAATTCATCACCATCACTAAGATCT

Fig. 8B (Cont.)

Fig. 9A
 SEQ ID NO:15

L	L	G	E	L	P	R	L	L	V	L	L	C	L	P	A	V	W	G		
D	C	G	L	P	P	D	V	P	N	A	Q	P	A	L	E	G	R	T	S	F
P	E	D	T	V	I	T	Y	K	C	E	E	S	F	V	K	I	P	G	E	K
D	S	V	I	C	L	K	G	S	Q	W	S	D	I	E	E	F	C	N	R	S
C	E	V	P	T	R	L	N	S	A	S	L	K	Q	P	Y	I	T	Q	N	Y
F	P	V	G	T	V	V	E	Y	E	C	R	P	G	Y	R	R	E	P	S	L
S	P	K	L	T	C	L	Q	N	L	K	W	S	T	A	V	E	F	C	K	K
K	S	C	P	N	P	G	E	I	R	N	G	Q	I	D	V	P	G	G	T	S
F	G	A	T	I	S	F	S	C	N	T	G	Y	K	L	F	G	S	T	R	E
F	C	L	I	S	G	S	S	V	Q	W	S	D	P	L	P	E	C	R	H	Y
Y	C	P	A	P	P	Q	I	D	N	G	I	I	Q	G	E	R	D	H	H	I
Y	R	Q	S	V	T	Y	A	C	N	K	G	F	T	M	I	G	E	E	H	S
Y	C	T	V	N	N	D	E	G	E	W	S	G	P	P	E	C	S	D	N	
S	S	P	N	K	C	T	P	P	N	V	E	N	G	I	L	V	F	V	M	
R	S	L	F	S	L	N	E	V	V	E	F	R	C	Q	P	G	L	P	R	
K	G	P	R	R	V	K	C	Q	A	L	N	K	W	E	P	E	L	P	S	
C	S	R	V	C	Q	P	P	P	D	V	L	H	A	E	R	T	Q	R	D	
K	D	N	F	S	P	G	Q	E	V	F	Y	S	C	E	P	G	Y	D	L	
R	G	A	A	S	M	R	C	T	P	Q	G	D	W	S	P	A	A	P	T	
C	E	V	K	S	C	D	D	F	M	G	Q	L	L	N	G	R	F	L		
P	V	N	L	Q	L	G	A	K	V	D	F	V	C	D	E	G	F	Q	S	
K	G	S	S	A	S	Y	C	V	L	A	G	M	E	S	L	W	N	G	R	
V	P	V	C	E	Q	I	F	C	P	S	P	P	V	I	P	N	G	R	H	
T	G	K	P	L	E	V	F	P	F	G	K	A	V	N	Y	T	C	D	P	
H	P	D	R	G	T	S	F	D	L	I	G	E	S	T	I	R	C	T	S	
D	P	Q	G	N	G	V	W	S	S	P	A	P	R	C	I	G	I	L	G	
C	Q	A	P	D	H	F	L	F	A	K	L	K	T	Q	T	N	A	S	D	
F	P	I	G	T	S	L	K	Y	E	C	R	P	E	Y	Y	G	R	P	F	
S	I	T	C	L	D	N	L	V	W	S	S	P	K	D	V	C	K	R	I	
S	C	K	T	P	P	D	P	V	N	G	M	V	H	V	I	T	D	I	Q	
V	G	S	R	I	N	Y	S	C	T	T	G	H	R	L	I	G	H	S	C	
A	E	C	I	L	S	G	N	A	A	H	W	S	T	K	P	I	T	N	R	
R	I	P	C	G	L	P	P	T	I	A	N	G	D	F	I	S	G	G		
E	N	F	H	Y	G	S	V	V	T	Y	R	C	N	P	G	S	D	D		
K	V	F	E	L	V	G	E	P	S	I	Y	C	T	S	N	D	D	Q		
G	I	W	S	G	P	A	P	Q	C	I	I	P	N	K	C	T	P	P		

Replacement Sheet
 Serial No. 10/597,373
 Inventor: M. Edward Medof

V	E	N	G	I	L	V	S	D	N	R	S	L	F	S	L	N	E	V	V
E	F	R	C	Q	P	G	F	V	M	K	G	P	R	S	V	K	C	Q	A
L	N	K	W	E	P	E	L	P	S	C	S	R	V	C	Q	P	P	D	D
V	L	H	A	E	R	T	Q	R	D	K	D	N	F	S	M	R	E	V	V
F	Y	S	C	E	P	G	Y	D	L	R	G	A	A	S	C	D	F	P	P
Q	G	D	W	S	P	A	A	P	T	C	E	V	K	S	C	D	A	F	M
G	Q	L	L	N	G	R	V	L	F	P	V	N	L	Q	L	G	C	V	V
D	F	V	C	D	E	G	F	Q	L	K	G	S	S	Q	A	S	F	L	V
A	G	M	E	S	L	W	N	S	S	V	P	V	C	E	L	F	C	P	P
S	P	P	V	I	P	Y	T	R	H	P	D	P	Q	E	T	V	F	D	L
G	K	A	V	N	Y	T	C	D	P	H	P	D	R	G	T	S	F	S	S
I	G	E	S	T	I	R	C	T	S	D	P	Q	G	N	G	V	F	F	A
P	A	P	R	C	G	I	H	H	H	F	P	Q	A	D	H	L	Y	E	.
K	L	K	T	Q	T	N	A	S	D	F	P	I	G	T	S	L	V	W	.
C	R	P	E	Y	Y	G	R	P	F	S	I	T	C	L	D	N	L	V	.
S	S	P	K	D	V	C	K	R	K	S	C	K	T	P	D	P	D	P	.
G	M	V	H	V	I	T	D	I	Q	V	H	R	L	I	G	H	S	S	.
G	S	R	I	N	Y	S	C	T	T	G	H	R	L	I	G	H	S	C	.
A	E	C	I	L	S	G	N	A	A	H	W	S	T	K	P	I	S	C	.
R	I	P	C	G	L	P	P	T	I	A	N	G	D	T	G	D	T	N	.
E	N	F	H	Y	G	S	V	V	T	Y	R	C	N	S	D	P	S	G	.
K	V	F	E	L	V	G	E	P	S	C	I	I	T	S	N	C	T	G	.
G	I	W	S	G	I	L	V	S	D	N	R	S	L	F	R	C	P	V	.
V	E	N	G	I	L	P	V	T	M	K	G	P	Q	P	N	K	P	Q	.
E	F	R	C	Q	P	G	F	V	M	S	C	R	V	F	S	L	V	Q	.
L	N	K	W	E	P	E	L	P	S	C	S	D	N	F	S	R	C	P	.
V	L	H	A	E	R	T	Q	R	D	K	D	G	A	S	S	M	C	F	.
F	Y	S	C	E	P	G	Y	D	L	R	G	V	N	L	S	G	D	F	.
Q	G	D	W	S	P	A	A	P	T	C	E	V	K	S	Q	A	C	K	.
G	Q	L	L	N	G	R	V	L	F	P	V	N	L	S	Q	A	V	F	.
D	F	V	C	D	E	G	F	Q	L	K	G	S	V	C	E	L	G	P	.
A	G	M	E	S	L	W	N	S	S	V	P	V	K	P	E	T	S	F	.
S	P	P	V	I	P	N	G	R	H	T	G	D	R	G	N	G	S	F	.
G	K	A	V	N	Y	T	C	D	P	H	P	D	R	G	N	G	S	F	.
I	G	E	S	T	I	R	C	T	S	D	P	Q	G	N	G	S	F	F	.
P	A	P	R	C	G	I	H	H	H	H	H	H	H	H	H	H	H	H	.

Fig. 9A (Cont.)

Fig 9B
 SEQ. ID NO:16

```

ATGACCGTCGGCGGCCGAGCGTGCCCCGGCGCTGCC
CTCCTCGGGAGCTGCCCCGGCTGCTGCTGGTGTGCTGCC
GACTGTGGCCTTCCCCAGATGTACCTAACCGCCAGCTT
CCCAGGATACTGTAATAACGTACAAATGTGAAGAAAGCTT
TGAAAGCTTCTGCAATCGTAGCTCAGTGCAGTTACAGA
GAGAACCTCTCTAAGGCTAAATTCTGCATCCCTCAAAC
AGCCTTATATCACTCAGAATTATTTCCAGTCGGTACT
GTTGTGGAATATGAGTGCCGTCCAGTTACAGAAGAGAAC
CTCTCTA

```

Replacement Sheet
Serial No. 10/597,373
Inventor: M. Edward Medof

TCACCAAAACTAACCTGCCTTCAGAATTAAAATGGTCCACAGCAGTCGAATTGTAAAAAG
AAATCATGCCCTAATCGGGAGAAATACGAAATGGTCAGATTGATGTACCAGGTGGCATATT
TTTGGTGCAACCCTCTCATGTAACACAGGGTACAAATTATTGGCTGACTCTAGT
TTTGCTTATTCAGGCAGCTCTGTCCAGTGGAGTGACCCGTTGCCAGAGTGCAGAGAAATT
TATTGTCCAGCACCACCAAATTGACAATGGAATAATTCAAGGGAACGTGACCATTATGGA
TATAGACAGTCTGTAACGTATGCATGTAATAAAGGATTCAACATGATTGGAGAGCACTCTATT
TATTGTACTGTGAATAATGATGAAGGAGAGTGGAGTGGCCCACCACCTGAATGC
TCGAGTCCTAACAAATGCACGCCTCAAATGTGGAAATATTGGTATCTGACAAC
AGAAGCTTATTTCTTAAATGAAGTGTGGAGTTAGGTGTCAGCCTGGCTTGTATG
AAAGGACCCCGCCGTGTGAAGTGCCAGGCCCTGAACAAATGGGAGCCGGAGCTACCAAGC
TGCTCCAGGGTATGTCAAGCACCTCCAGATGTCCTGCATGCTGAGCGTACCCAAAGGGAC
AAGGACAACCTTCACCTGGCAGGAAGTGTCTACAGCTGTGAGGCCGGTACGACCTC
AGAGGGCTCGCTCATGCGCTGCACACCCCAGGGAGACTGGAGCCCTGCAGCCCCACA
TGTGAAGTGAATCCTGTATGACTTCATGGCCAACCTCTTAATGGCGTGTGCTATT
CCAGTAAATCTCCAGCTGGAGCAAAAGTGGATTGTGATGAAGGATTCAATT
AAAGGCAGCTCTGCTAGTTACTGTCTTGCTGGAATGGAAAGCCTTGGAAATAGCAGT
GTTCCAGTGTGTGAACAAATCTTGTCCAAGTCCTCCAGTTATTCTTAATGGGAGACAC
ACAGGAAAACCTCTGGAAAGTCTTCCCTTGGAAAAGCAGTAAATTACACATGCGACCCC
CACCCAGACAGAGGGACGAGCTCGACCTCATTGGAGAGAGCACCATCCGCTGCACAAGT
GACCTCAAGGGATGGGTTGGAGCAGCCCTGCCCTCGCTGTGGAATTCTGGGTAC
TGTCAAGCCCCAGATCATTCTGTTGCCAAGTTGAAAACCAAACCAATGCATCTGAC
TTTCCCATTGGACATCTTAAAGTACGAATGCCGTCTGAGTACTACGGGAGGCCATT
TCTATCACATGTCTAGATAACCTGGTCTGGTCAAGTCCTAAAGATGTCTGAAACGTAAA
TCATGTAAAACCTCTCCAGATCCAGTGAATGGCATGGTGCATGTGATCACAGACATCCAG
GTTGGATCCAGAATCAACTATTCTGTACTACAGGGACCGACTCATTGGTCACTCATCT
GCTGAATGTATCCTCTCGGGCAATGCTGCCATTGGAGCACGAAGCCGCAATTGTCAA
CGAATTCTTGTGGCTACCCCCCACCATGCCAATGGAGATTCAATTAGCACCAACAGA
GAGAATTTCACATGGATCAGTGGTACCTACCGCTGCAATCTGGAAGCGGAGGGAGA
AAGGTGTTGAGCTGTGGGTGAGCCCTCCATATACTGCACAGCAATGACGATCAAGTG
GGCATCTGGAGCGGCCGGCCCTCAGTGCATTACCTAACAAATGCACGCCCTCAAAT
GTGGAAAATGGAAATTGGTATCTGACAACAGAAGCTTATTCTTAAATGAAGTGTG
GAGTTAGGTGTACGCCCTGGCTTGTGATGAAAGGACCCCGCCGTGTGAAGTGCAGGCC
CTGAACAAATGGGAGCCGGAGCTACCAAGCTGCCAGGGTATGTGACCCACCTCCAGAT
GTCCTGCATGCTGAGCGTACCCAAAGGGACAAGGACAACCTTCACCCGGCAGGAAGTG
TTCTACAGCTGTGAGCCGGCTATGACCTCAGAGGGCTCGTCTATGCGCTGCACACCC
CAGGGAGACTGGAGCCCTGCAGCCCCACATGTGAAGTGAATCCTGTGATGACTTCATG
GGCCAACCTCTTAATGGCCGTGTGCTATTCCAGTAAATCTCAGCTGGAGCAAAAGTG
GATTTGTTGTGATGAAGGATTCAATTAAAAGGCAGCTCTGCTAGTTATTGTGCTTG
GCTGGAATGGAAAGCCTTGGAAATAGCAGTGTCCAGTGTGTAACAAATCTTGTCCA
AGTCCTCAGTTATTCTTAATGGGAGACACACAGGAAAACCTCTGGAAGTCTTCCCTT
GGAAAAGCAGTAAATTACACATGCCACCCCCACCCAGACAGAGGGACGAGCTCGACCTC
ATTGGAGAGAGCACCACCGCTGCACAAGTGCACCCCTCAAGGGAAATGGGTTGGAGCAGC
CCTGCCCTCGCTGTGGAATTCTGGTCACTGTCAAGCCCCAGATCATTCTGTTGCC
AAGTTGAAAACCAAACCAATGCATCTGACTTCCCATTGGACATCTTAAAGTACGAA
TGCCGTCCTGAGTACTACGGGAGGCCATTCTCTATCACATGTCTAGATAACCTGGTCTGG
TCAAGTCCAAAGATGTCTGTAACGTAAATCATGTAACACTCCTCCAGATCCAGTGAAT
GGCATGGTGCATGTGATCACAGACATCCAGGTT
GGATCCAGAATCAACTATTCTGTACTACAGGGACCGACTCATTGGTCACTCATCT
GCTGAATGTATCCTCTCGGGCAATGCTGCCATTGGAGCACGAAGCCGCAATTGTCAA
CGAATTCTTGTGGCTACCCCCCACCACGCCAATGGAGATTCAATTAGCACCAACAGA
GAGAATTTCACATGGATCAGTGGTACCTACCGCTGCAATCCTGGAAGCGGAGGGAGA

Fig. 9B (Cont.)

Replacement Sheet
 Serial No. 10/597,373
 Inventor: M. Edward Medof

R	S	L	F	S	L	N	E	V	V	E	F	R	C	Q	P	G	F	V	M	
K	G	P	R	R	V	K	C	Q	A	L	N	K	W	E	P	E	L	P	S	
C	S	R	V	C	Q	P	P	D	V	L	H	A	E	R	T	Q	R	D		
K	D	N	F	S	P	G	Q	E	V	F	Y	S	C	E	P	G	Y	D	L	
R	G	A	A	S	M	R	C	T	P	Q	G	D	W	S	P	A	A	P	T	
C	E	V	K	S	C	D	D	F	M	G	Q	L	L	N	G	R	V	L	F	
P	V	N	L	Q	L	G	A	K	V	D	F	V	C	D	E	G	F	Q	L	
K	G	S	S	A	S	Y	C	V	L	A	G	M	E	S	L	W	N	S	S	
V	P	V	C	E	Q	I	F	C	P	S	P	P	V	I	P	N	G	R	H	
T	G	K	P	L	E	V	F	P	F	G	K	A	V	N	Y	T	C	D	P	
H	P	D	R	G	T	S	F	D	L	I	G	E	S	T	I	R	C	T		
D	P	Q	G	N	G	V	W	S	S	P	A	P	R	C	G	I	L			
V	E	S	K	Y	G	P	P	C	P	S	C	P	A	P	E	F	L			
G	G	P	S	V	F	L	F	P	P	K	P	K	D	T	L	M	I	S	R	
T	P	E	V	T	C	V	V	V	D	V	S	Q	E	D	D	P	E	V	Q	F
N	W	Y	V	D	G	V	E	V	H	N	A	K	T	K	P	R	E	E	Q	
F	N	S	T	Y	R	V	V	S	V	L	T	V	L	H	Q	D	W	L	N	
G	K	E	Y	K	C	K	V	S	N	K	G	L	P	S	S	I	E	K	T	
I	S	K	A	K	G	Q	P	R	E	P	Q	V	Y	T	L	P	P	S	Q	
E	E	M	T	K	N	Q	V	S	L	T	C	L	V	K	G	F	Y	P	S	
D	I	A	V	E	W	E	S	N	G	Q	P	E	D	N	Y	K	T	T	P	
P	V	L	D	S	D	G	S	F	F	L	Y	S	R	L	T	V	D	K	S	
R	W	Q	E	G	N	V	F	S	C	S	V	M	H	E	A	L	H	N	H	
Y	T	Q	K	S	L	S	L	S	P	G	K									

Fig. 11A (Cont.)

Fig. 11B
 SEQ. ID NO:20

```

ATGACCGTCGCGCGGCCGAGCGTGCCCGCGCGCTGCC
CTCCTCGGGGAGCTGCCCGGCTGCTGCTGGTGTGCTGCC
GACTGTGGCCTTCCCCCAGATGTACCTAATGCCAGCAGCTT
CCCGAGGATACTGTAATAACGTACAAATGTGAAGAAAAGCTT
GAAAGCTTGTGAAAATTCCCTGGCGAGAACAGTACAAGTT
GACTCAGTGTACTGCCTTAAGGGCAGTCATGGTCAGATATT
GAAGAGTTCTGCAATCGTACAGTGTGAAAGAGTTCTGAGA
TGCAGGTCGCAACAAGGCTAAATTCTGCATCCCTCAAACAG
CCTTATATCAGTCAGAATTCTGAGGCTTCTGAGGCTTCTG
TTTCCAGTGTGAAACAGGCTTCTGAGGCTTCTGAGGCTT
CTGAGGCTTCTGAGGCTTCTGAGGCTTCTGAGGCTTCTG
TTTCCAGTGTGAAACAGGCTTCTGAGGCTTCTGAGGCTT
CTGAGGCTTCTGAGGCTTCTGAGGCTTCTGAGGCTTCTG
AAATCATGCCCTAATCCGGGAGAAATACGAAATGGTCAGAT
TGTGAAACAGGCTTCTGAGGCTTCTGAGGCTTCTGAGGCTT
TTTGGTGCAACCCTCCCTCATGTAACACAGGCTTCTGAGG
CTTCTGAGGCTTCTGAGGCTTCTGAGGCTTCTGAGGCTT
TTTGTCTTATTTCAGGCAGCTCTGTCCAGTGGAGTGA
CCCGTTGAGGCTTCTGAGGCTTCTGAGGCTTCTGAGGCTT
TATTGTCCAGCACCACAAATTGACAATGGAATAATTCAAG
GGGAACGTGACCATTATGGA
TATAGACAGTCTGTAACGTATGCATGTAATAAGGATTCA
CCATGATTGGAGAGCACTCTATT
TATTGTACTGTGAATAATGATGAAGGAGAGTGGAGTGGCCC
ACCACCTGAATG
TCGAGTCCTAACAAATGCACGCCCTCAAATGTGGAAAATG
GAATATTGGTATCTGACAAC
AGAAGCTTATTTCCTTAAATGAAGTTGTGGAGTTAGGTGT
CAGCCCTGGCTTGTCA
AAAGGACCCGCCGTGTGAAGTGCACGCCACCTCCAGATG
TCCTGCCAGGGTATGTCAGCCACCTCCAGATGTCATGTC
GAGCGTACCCAAAGGGAC
AAGGACAACCTTACCTGGCAGGAAGTGTCTACAGCTGTGAG
GCCCGCTACGACCTC

```

Replacement Sheet
Serial No. 10/597,373
Inventor: M. Edward Medof

AGAGGGGCTGCGTCTATGCGCTGCACACCCAGGGAGACTGGAGGCCCTGCAGCCCCCACA
TGTGAAGTGAATCCTGTGATGACTTCATGGGCCAACTTCTTAATGGCCGTGCTATT
CCAGTAAATCTCCAGCTTGAGAAAAGTGGATTGTTGTGATGAAGGATTCATTAA
AAAGGCAGCTCTGCTAGTTACTGTGTCTTGGCTGGAATGGAAAGCCTTGGAAATAGCAGT
GTTCCAGTGTGTGAACAAATCTTTGTCCAAGTCCTCCAGTTATTCTTAATGGGAGACAC
ACAGGAAAACCTCTGGAAGTCTTCCCTTGGAAAAGCAGTAAATTACACATGCGACCCC
CACCCAGACAGAGGGACGAGCTTCGACCTCATGGAGAGAGCACCATCGCTGCACAAGT
GACCTCAAGGGATGGGTTGGAGCAGCCCTGCCCTCGCTGTGGAAATTCTG
GTTGAGTCAAATATGGTCCCCCATGCCCATCATGCCAGCACCTGAGTTCTG
GGGGGACCATCAGTCTTCCTGTTCCCCAAAACCAAGGACACTCTCATGATCTCCGG
ACCCCTGAGGTACGTGCGTGGTGGACGTGAGCCAGGAAGACCCCGAGGTCCAGTTC
AACTGGTACGTGGATGGCGTGGAGGTGCATAATGCCAAGACAAAGCCGGGAGGAGCAG
TTCAACAGCACGTACCGTGTGGTCAGCGTCCTCACCGTCTGCACCAGGACTGGCTGAAC
GGCAAGGAGTACAAGTGAAGGTCTCCAACAAAGGCCCTCCGTCTCCATCGAGAAAACC
ATCTCCAAGCCAAGGGCAGCCCCGAGGCCACAGGTGTACACCCCTGCCCTCATCCCAG
GAGGAGATGACCAAGAACCGAGTCAGCCTGACCTGCCTGGTCAAAGGCTCTACCCAGC
GACATGCCGTGGAGTGGAGAGCAATGGGCAGCCGGAGGACAACATACAAGACCACGCC
CCCGTGTGGACTCCGACGGCTCTTCTACAGCAGGCTAACCGTGGACAAGAGC
AGGTGGCAGGAGGGAAATGTCTCTCATGCTCCGTGATGCATGAGGCTCTGCACAACCAC
TACACACAGAAGAGCCTCTCCCTGTCTCCGGTAAATGATAAAGATCT

Fig. 11B (Cont.)

Fig. 12A

SEQ. ID NO:21

ATA TAC GAA TTC TGG GTC ACT GTG AGG AGC CAC CAA CAT TTG AAG C

Fig. 12B

SEQ. ID NO:22

ACA GTG AGA TCT TTA GTG ATG GTG ATG GTG ATG CGA CAC TTT AAG ACA CTT
TGG AAC

Fig. 13A

SEQ. ID NO:23

M	T	V	A	R	P	S	V	P	A	A	L	P	L	C	L	P	A	V	W	G
L	L	G	E	L	P	R	L	L	L	V	P	L	A	F	V	E	R	T	S	F
D	C	G	L	P	P	D	V	P	N	A	Q	P	S	I	E	K	P	C	N	K
P	E	D	T	V	I	T	Y	K	C	E	E	S	D	Q	P	Y	F	C	Q	S
D	S	V	I	C	L	K	G	S	Q	W	S	L	K	Q	P	R	E	T	N	S
C	E	V	P	T	R	L	N	S	A	S	L	K	Q	G	T	V	F	C	Q	Y
F	P	V	G	T	V	V	E	Y	E	C	R	P	S	T	A	V	E	F	G	L
S	P	K	L	T	C	L	Q	N	L	K	W	S	Q	I	D	V	P	C	K	K
K	S	C	P	N	P	G	E	I	R	N	G	T	I	K	L	F	G	S	T	S
F	G	A	T	I	S	F	S	C	N	T	G	Y	K	L	P	E	R	C	R	I
F	C	L	I	S	G	S	S	V	Q	W	S	D	P	L	P	E	S	S	E	I

Replacement Sheet
Serial No. 10/597,373
Inventor: M. Edward Medof

Fig. 13A (Cont.)

Fig. 13B

SEQ. ID NO:24

ATGACCGTCGCCGGCCGAGCGTCCCCGCGCTGCC
CTCCTGGGGAGCTGCCCGCTGCTGCTGGTGTGCCTGCCGGCGTGTGGGGT
GAAGTGCTGGCCTCCCCAGATGTACCTAATGCCAGCCAGCTTGGAAAGGCCGTACAAGTTT
CCCAGGGATACTGTAATAACGTACAAATGTGAAGAAAGCTTGTGAAAATTCTGGCGAGAAC
GAAGTCAGTGATCTGCCCTAACGGGCACTCAATGGTCAGATATTGAAGAGTCTGCAATCGTAGC
TGCGAGGTGCCAACAGGCTAAATTCTGCATCCCTCAAACAGCCTTATATCACTCAGAATTAT
TTTCCAGTCGGTACTGTTGTGAAATATGAGTGCCGTCAGGTTACAGAAAGAACCTTCTCTA
TCACACAAACTAACCTGCCCTCAGAATTAAATGGTCCACAGCAGTCGAATTGGTAAAAAG
AAATCATGCCCTAACCGGGAGAAATACGAAATGGTCAGATTGATGTACCAGGTGGCATATTAA
TTTGGTGCAACCATTCCCTCTCATGTAACACAGGGTACAAATTATTGGCTCGACTCTAGT
TTTTGTCTTATTTCAGGCAGCTGTCCAGTGGAGTGACCCGTTGCCAGAGTCAGAGAAATT
TATTGTCCAGCACCAACAAATTGACAATGGAATAATTCAAGGGAACGTGACCATTATGGA
TATAGACAGTCTGTAACGTATGCATGTAATAAAGGATTACCATGATTGGAGAGACTCTATT
TATTGTACTGTGAATAATGATGAAGGGAGAGTGGAGTGGCCACACCTGAATGC
TCGAGTCCTAACAAATGCACGCCCTCAAATGTGGAAATATTGGTATCTGACAAC
AGAAGCTTATTTCCTTAATGAAGTTGTGGAGTTAGGTGTCAAGCCTGGCTTGTCAATG

AAAGGACCCCGCCGTGTGAAGTGCCAGGCCCTGAACAAATGGGAGCCGGAGCTACCAAGC
TGCTCCAGGGTATGTCAGCCACCTCCAGATGTCCTGCATGCTGAGCGTACCCAAAGGGAC
AAGGACAACTTTACCTGGCAGGAAGTGTCTACAGCTGTGAGCCCGCTACGACCTC
AGAGGGGCTGCGTCTATGCGCTGCACACCCCAGGGAGACTGGAGCCCTGCAGCCCCACA
TGTGAAGTGAATCCTGTGATGACTCATGGGCCAACTTCTTAATGGCCGTGCTATT
CCAGTAAATCTCCAGCTTGGAGCAAAAGTGGATTGTGATGAAGGATTCAATT
AAAGGCAGCTCTGCTAGTTACTGTGTCTGGCTGGAATGAAAGCCTTGGAAATAGCAGT
GTTCCAGTGTGTGAACAAATCTTGTCCAAGTCCTCCAGTTATTCTAATGGGAGACAC
ACAGGAAAACCTCTGGAAGTCTTCCCTTGAAAAGCAGTAAATTACACATGCGACCCC
CACCCAGACAGAGGGACGAGCTCGACCTCATTGGAGAGAGCACCATCCGCTGCACAAGT
GACCCTCAAGGGAATGGGTTGGAGCAGCCCTGCCCTCGCTGTGGAAATTCTGGGTCAC
TGTGAGGAGGCCACCAACATTGAAGCTATGGAGCTATTGGTAAACCAAAACCTACTAT
GAGATTGGTGAACGAGTAGATTATAAGTGTAAAAAAGGATACTTCTATATACCTCCTTT
GCCACCCATACTATTGTGATCGGAATCATACTGGCTACCTGTCTCAGATGACGCCGT
TATAGAGAACATGTCCATATACGGGATCCTTAAATGGCCAAGCAGTCCCTGCAAAT
GGGACTTACGAGTTGGTTATCAGATGCACTTATTGTAATGAGGGTTATTACTTAATT
GGTGAAGAAATTCTATATTGTGAACCTAAAGGATCAGTAGCAATTGGAGCGGTAAAGCCC
CCAATATGTGAAAAGGTTGTGTACACCACCTCCAAAAATAAAAAATGGAAAACACACC
TTAGTGAAGTAGAAGTATTGAGTATCTGATGCAGTAACCTATAGTTGTGATCCTGCA
CCTGGACCAAGATCCATTTCACTTATTGGAGAGAGCAGGATTATTGTGGTGACAATTCA
GTGTGGAGTCGTGCTGCCAGAGTGTAAAGTGGTCAAATGTCGATTCCAGTAGTCGAA
AATGGAAAACAGATACTAGGATTGGAAAAAAATTACTACAAAGCAACAGTTATGTT
GAATGCGATAAGGGTTTACCTCGATGGCAGCGACACAATTGTCTGTGACAGTAACAGT
ACTTGGGATCCCCAGTTCAAAGTGTCTAAA / GTGTCG // CATCACCATCACCATCAC
TAAAGATCT

Fig. 13B (Cont.)